

MANUAL  
OF  
PHYSICAL DRILL.

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UNITED STATES NAVY.

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A MANUAL  
OF  
PHYSICAL DRILL

OR  
SETTING-UP EXERCISES

FOR USE IN

THE NAVY OF THE UNITED STATES.

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WASHINGTON:  
GOVERNMENT PRINTING OFFICE.  
1898.





NAVY DEPARTMENT,

*Washington, November 5, 1897.*

These exercises have been prepared by Chaplain W. O. Holway, U. S. N., under the direction of the Department. It is directed that when circumstances permit they be used at morning and evening quarters, except on Sundays and holidays, and that the divisional petty officers be instructed in conducting these exercises, in order that they may take charge when the divisional officers are not present.

JOHN D. LONG,  
*Secretary.*



FIG. 1.—“POSITION.”

# PHYSICAL DRILL.

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## I.—WITHOUT ARMS.

Form the squad, or crew, in as many ranks as the space will permit, facing to the front. Two (or three) paces, take intervals.

### 1. POSITION.

Heels together, toes turned out. Hands by the sides, palms in. Abdomen in, chest out. Shoulders back and down. Head up, chin in.

COMMAND: *Position!*



FIG. 2.—“SIDE SWEEPS,” AT VERTICAL.

## 2. SIDE SWEEPS.

[A 2-count movement, performed twice.]

1. Slowly inflate the lungs through the nose (keeping the mouth shut), at the same time raising the arms in side semicircles to vertical, and emphasizing the out and up stretch. At vertical the knuckles should touch, the elbows should be straight, the lower arms should lightly press the ears. The lungs should be full.

2. Return arms through side semicircles to sides, slowly exhaling.

Take seven or eight seconds for each upward and downward sweep.

COMMAND: *Side Sweeps, Slow*—1, 2; 1, 2.

SPECIAL ACTION.—The hundred and more muscles concerned in deep respiration, and especially the muscles of the side walls of the chest.



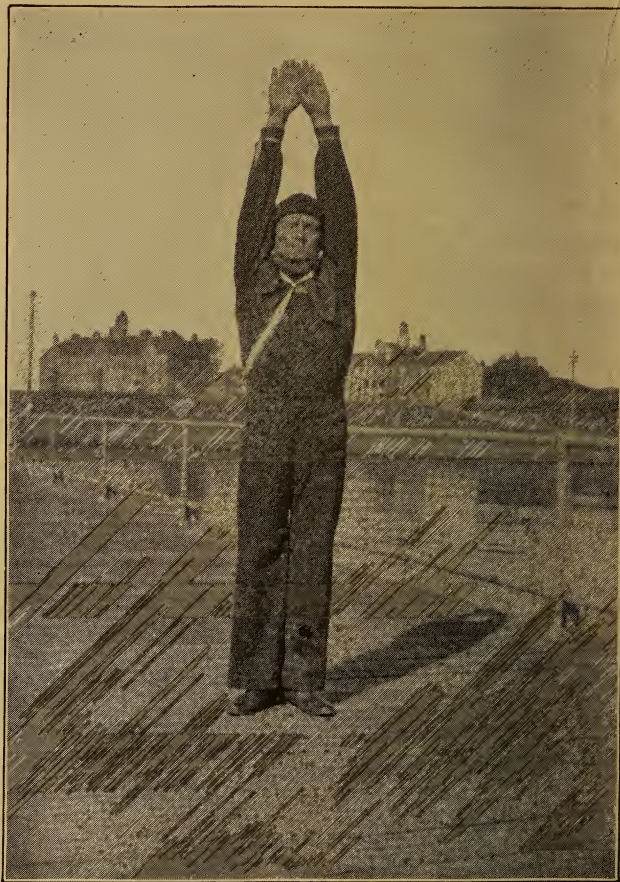


FIG. 3.—“FRONT SWEEPS,” AT VERTICAL.

### 3. FRONT SWEEPS.

[A 2-count movement, performed twice.]

1. Hands at side, back of hands front. Inflate the lungs slowly through the nose (keeping the mouth shut), at the same time raising the arms slowly, through front semicircles, to vertical. Emphasize the out and up stretch. When at vertical the thumbs should be interlaced, palms front, elbows straight, and lower arms brushing the ears. The lungs should be full.

2. Return the arms through front semicircles to sides, and past as far as possible, exhaling slowly, but keeping chest out and chin in.

Take seven or eight seconds for each upward and downward sweep.

COMMAND: *Front Sweeps, Slow*—1, 2; 1, 2.

SPECIAL ACTION.—The muscles concerned in deep respiration, and especially the front walls of the chest.



FIG. 4.—“FINGERS,” FIRST POSITION.



#### 4. FINGERS.

[A 2-count movement, performed twice (or more) in four positions.]

1. Hands at sides. Throw the fingers wide apart and backward energetically. Close them lightly. Perform movement twice. Emphasize odd counts.

2. Raise the arms to side horizontals, elbows straight. Perform movement twice.

3. Bring the arms to front horizontals, elbows straight. Perform movement twice.

4. Raise the arms to vertical, elbows straight. Perform movement twice.

COMMAND: *Fingers, Open and Shut*—1, 2; 1, 2. *Sides*—1, 2; 1, 2. *Front*—1, 2; 1, 2. *Up*—1, 2; 1, 2.

SPECIAL ACTION.—The muscles of the fingers and forearms.



FIG. 5.—“FINGERS,” SECOND POSITION.



FIG. 6.—“FINGERS,” THIRD POSITION. (Side view.)



FIG. 7.—“FINGERS,” FOURTH POSITION.







FIG. 8.—“WRISTS,” FIRST POSITION. (Side view to show movement.)

## 5. WRISTS.

[A 2-count movement, performed twice (or more) in four positions.]

1. Hands at vertical (where the last exercise left them). Keep fingers and elbows straight. Bend hands backward as far as possible. Then forward. Perform movement twice.

2. Let arms fall to front horizontals, elbows straight. Perform movement twice.

3. Swing arms to side horizontals, elbows straight. Perform movement twice.

4. Drop arms to sides, elbows straight. Perform movement twice.

COMMAND: *Hands, Back and Forward*—1, 2; 1, 2: *Front*—1, 2; 1, 2. *Side*—1, 2; 1, 2. *Down*—1, 2; 1, 2.

SPECIAL ACTION.—The muscles of the wrists and forearms.



FIG. 9.—“WRISTS,” SECOND POSITION.





FIG. 10.—“WRISTS,” THIRD POSITION.



FIG. 11.—“WRISTS,” FOURTH POSITION. (Side view.)

## 6. ARMS.

[A 2-count movement, performed eight (or more) times.]

1. Hands at the sides. Close hands tightly. Bring forearms strongly up in front to face of shoulders, keeping elbows stationary at sides.

2. Thrust the fists strongly down past the sides as far as possible, twisting the arms. Throw the chest out, and keep the head back and chin in.

COMMAND: *Arms, Curl and Thrust*—1, 2; 1, 2, etc.

SPECIAL ACTION.—The principal muscles of the arms; also those of the chest and back of the neck.



FIG. 12.—“ARMS,” END OF FIRST COUNT.





FIG. 13.—“ARMS,” END OF SECOND COUNT. (Side view.)



FIG. 14.—“ARM CIRCLE,” END OF FIRST COUNT. (Side view.)

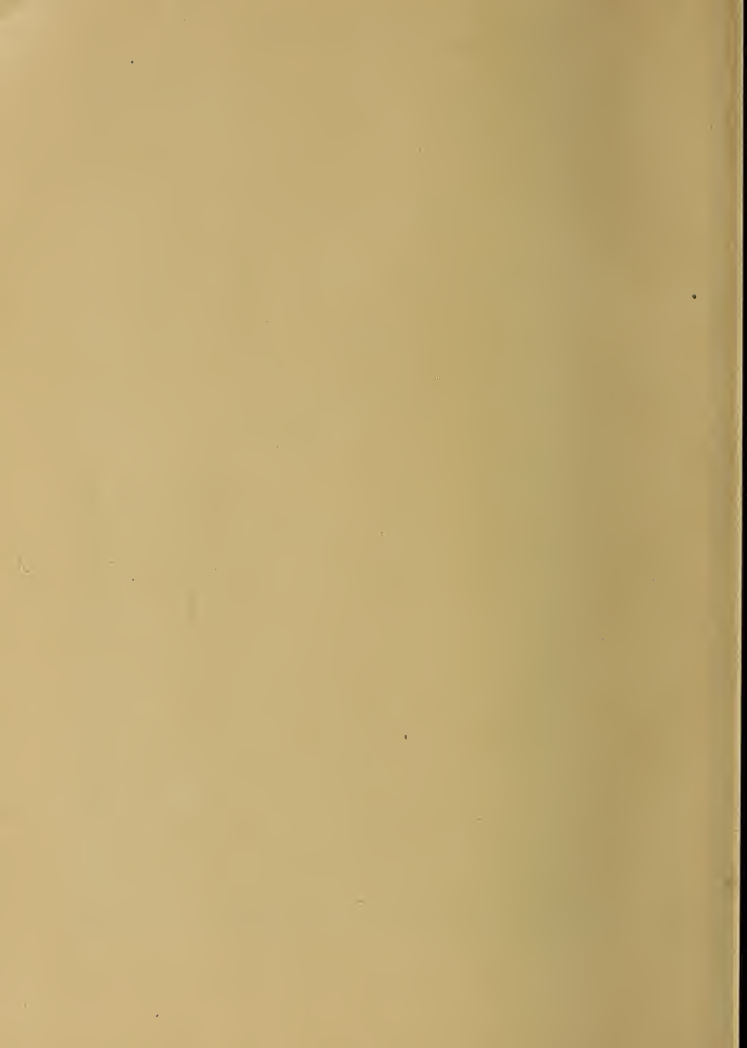
## 7. ARM CIRCLE.

[A 2-count movement, performed eight (or more) times.]

1. Hands at sides, palms back. Sweep the arms up diagonally and circle backward to as far past side horizontals as possible, twisting the palms upward and bending the thumbs down. Throw chest well out, and keep head back and chin in. Emphasize this count.
2. Drop arms to sides.

COMMAND: *Arms, Circle Backward*—1, 2; 1, 2, etc.

SPECIAL ACTION—The rotary muscles of the arms and shoulders.





## 8. SHOULDERS.

[A 2-count movement, performed eight (or more) times.]

1. Raise shoulders a little. Roll them strongly as far back and down as possible, keeping elbows straight and acting as if carrying a heavy weight in each hand.
2. Let shoulders drop forward easily.

COMMAND: *Shoulders, Roll Back and Down*—1, 2; 1, 2, etc.

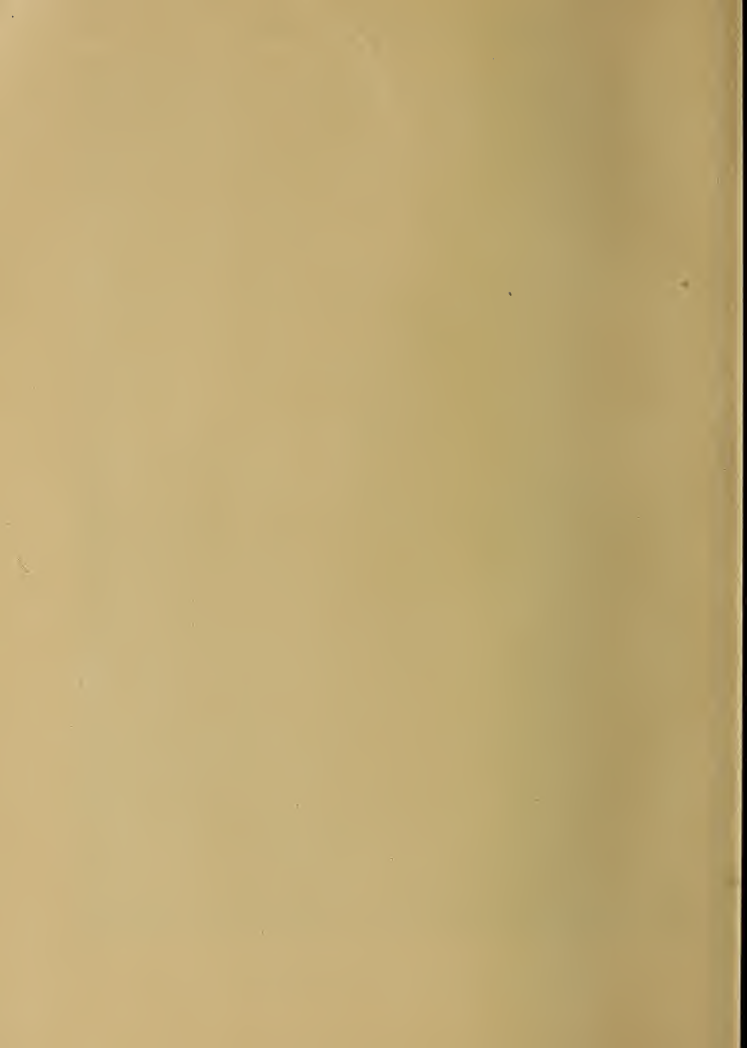
SPECIAL ACTION.—Back muscles of the shoulder, and those of the back.



FIG. 15.—“SHOULDERS,” END OF FIRST COUNT. (Side view.)



FIG. 16.—“SHOULDERS,” END OF SECOND COUNT.



## 9. NECK.

(A 2-count movement, performed eight (or more) times.)

1. Drop head forward. Interlace fingers at the back of the head, elbows parallel in front. Push the head back, resisting the movement by pulling hard with the hands. Emphasize the count.
2. Pull the head forward.

COMMAND: *Hands at Back of Head, Slow—1, 2; 1, 2, etc.*  
(When through, *Hands at Sides.*)



FIG. 17.—“NECK,” END OF FIRST COUNT. (Side view.)





FIG. 18.—“NECK,” END OF SECOND COUNT.



FIG. 19.—“RISING ON TOES.”



## 10. TOES.

[A 2-count movement, performed eight (or more) times.]

1. Rise slowly and as high as possible on toes, body erect.
2. Back to "Position."

COMMAND: *Toes, Rise Slowly*—1, 2; 1, 2, etc.

SPECIAL ACTION.—The muscles of the toes, of the bottom of the feet, of the ankles and calves.

## 11. HEELS.

[A 2-count movement, performed eight (or more) times.]

1. Rise sharply on heels, keeping the body erect. Keep thighs and chest well forward.

2. Back to "Position."

COMMAND: *Rise on Heels*—1, 2; 1, 2, etc.

SPECIAL ACTION.—The muscles of the front of the lower leg.

## 12. FEET.

[A 2-count movement, performed eight (or more) times.]

1. With feet together, and keeping knees straight, raise the toes up, and spread feet apart toward side horizontals, pivoting on the heels. Emphasize this count.

2. Back easily to "Position."

COMMAND: *Feet, Spread Apart*—1, 2; 1, 2, etc.

SPECIAL ACTION.—The muscles of the upper foot and and back of hip.



FIG. 20.—“KNEE STOOP,” FIRST COUNT. (Side view.)

### 13. KNEE STOOP.

[A 2-count movement, performed eight (or more) times.]

1. Hands on hips, thumbs back, fingers forward, elbows bent. Bend knees obliquely, and let the body go down slowly (rising on toes) till the thighs touch the heels. Keep shoulders and head back and chin in.
2. Return slowly to "Position."

COMMAND: *Knee Stoop, Slow*—1, 2; 1, 2, etc.

SPECIAL ACTION.—The thigh muscles and the joints of the legs.



FIG. 21.—“KNEE LIFT” (side view), FIRST COUNT. At count the knee should touch the chest.



## 14. KNEE LIFT.

[A 4-count movement, performed four (or more) times.]

1. Lift right knee, striking chest, if possible.
2. Back to "Position."
3. Lift left knee, striking chest, if possible.
4. Back to "Position."

COMMAND: *Knee Lift*—1, 2, 3, 4; 1, 2, 3, 4, etc.

SPECIAL ACTION.—Front muscles of the thighs.



FIG. 22.—“THIGHS,” AT END OF THIRD COUNT.

## 15. THIGHS.

[A 4-count movement, performed four (or more) times.]

1. Rise on toes.
2. Back to "Position."
3. Jump, separating the feet sideways as far as can be done without straining the inside of the thighs, at the same time throwing up arms sideways to nearly vertical.
4. Jump back to "Position."

COMMAND· *Jump, Feet Apart*—1, 2, 3, 4; 1, 2, 3, 4, etc.

SPECIAL ACTION.—The inside muscles of the thighs and the calves.



FIG. 23.—“SIDE STOOP,” END OF THIRD COUNT.

## 16. SIDE STOOP.

[A 4-count movement, performed four (or more) times.]

1. Hands on tops of shoulders, elbows back. Push the right arm to a vertical, at the same time bending the body to the left and touching the deck at the side of the left heel with the left hand. Keep the right knee stiff, the head up, and the eyes directed upward to the right hand.

2. Back to "Position," tops of shoulders.

3. Push the left arm up to vertical, bend to the right, and touch the deck beside the right heel with the right hand, turning the eyes upward.

4. Back to "Position," hands at sides.

COMMAND: *Side Stoop, Slow*—1, 2, 3, 4; 1, 2, 3, 4, etc.  
(When through, *Hands at Sides.*)

SPECIAL ACTION.—The side muscles of the body; the movement has also a healthful effect upon the liver.

## 17. STATIONARY WALK (OR RUN).

[As many counts—1, 2; 1, 2; etc.—as may seem desirable.]

Keep the thighs perpendicular and the knees well back. Try to strike the back of the thigh with the heel each time the foot is raised. The exercise may be done either as a run or as a walk.

COMMAND: *Stationary Walk. Quick Time—1, 2; 1, 2, etc.*  
(or, *Stationary Run. Double Quick—1, 2; 1, 2, etc.*). *Halt!*

SPECIAL ACTION.—The back muscles of the thighs and the respiratory muscles.







FIG. 24.—“COMING TO READY,” FIRST POSITION.

## II.—UNDER ARMS.

[All movements in this section are 4-counts, and, except "Coming to Ready," are performed two (or four) times.]

### 1. COMING TO READY.

Take intervals as in preceding section. Standing at order—

1. Raise the piece with the right hand, grasp it with the left at the height of the right shoulder, knuckles towards the body. The right hand will grasp the small of the stock, forefinger under the guard.

2. Let the piece drop in front of the body to a horizontal, slings down, keeping body erect.

3. Raise the piece horizontally to the height of the shoulders, slings up, at the same time moving the right foot to the right about twelve inches. Keep the chest out, and the shoulders well back. This position is "Ready," and is the starting point of all the movements under arms.

COMMAND: *Come to Ready*—1, 2, 3.

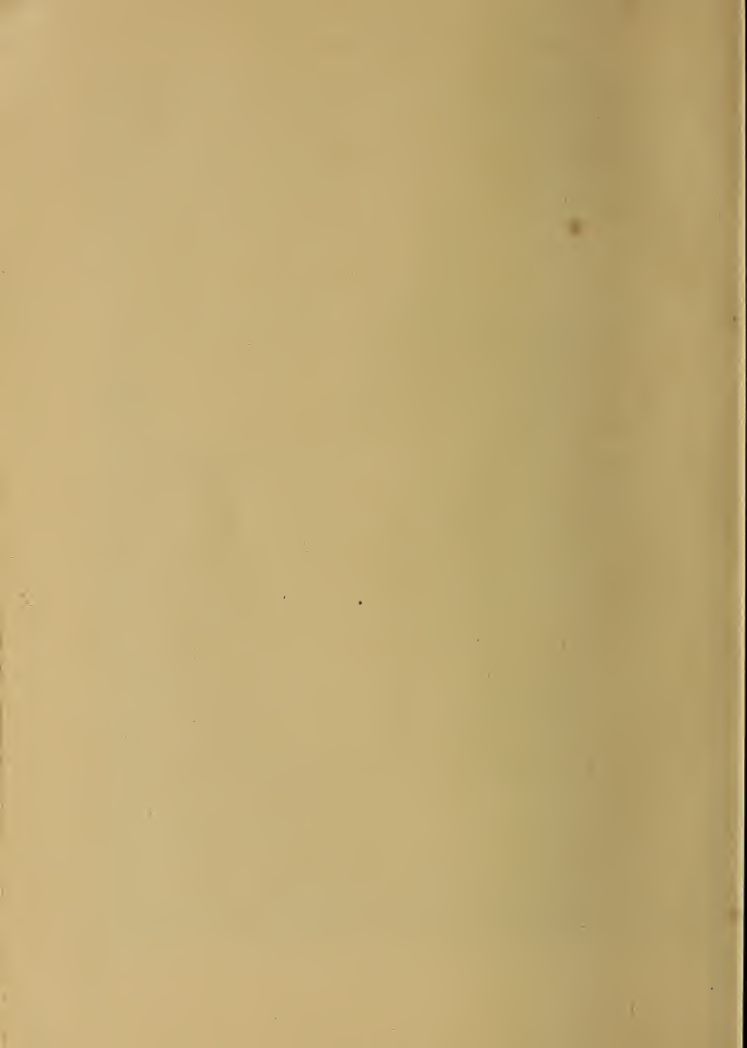


FIG. 25.—“COMING TO READY,” SECOND POSITION.



FIG. 26.—“READY.”







## 2. DOWN AND FORWARD.

1. From "Ready," lower the piece horizontally to the insteps, keeping arms and knees (if possible) straight.
2. Back to "Ready," chest out, elbows back.
3. Push piece horizontally forward.
4. Back to "Ready."

COMMAND: *Down and Forward*—1, 2, 3, 4; 1, 2, 3, 4, etc.

SPECIAL ACTION.—The muscles of the hips, back and arms.



FIG. 27.—“DOWN AND FRONT,” END OF FIRST COUNT.



FIG. 28.—“DOWN AND FRONT,” END OF THIRD COUNT.



FIG. 29.—“FORWARD AND UP,” THIRD COUNT.

### 3. FORWARD AND UP.

1. From "Ready," push out horizontally forward, as in the last exercise.
2. Back to "Ready," chest out, elbows back.
3. Push the piece to high vertical, keeping it horizontal, and expanding chest.
4. Back to "Ready."

COMMAND: *Forward and Up*—1, 2, 3, 4; 1, 2, 3, 4.

SPECIAL ACTION.—The muscles of the arms, and of side walls of the chest.





FIG. 30.—“UP AND SHOULDERS,” SECOND COUNT.



#### 4. UP AND SHOULDERS.

1. From "Ready," push the piece to vertical, as in last exercise.
2. Lower piece to back of shoulders, head up, elbows well back.
3. Up again to vertical.
4. Down to "Ready."

COMMAND: *Up and Shoulders*—1, 2, 3, 4; 1, 2, 3, 4.

SPECIAL ACTION.—The muscles of the arms, and of the side and front walls of the chest.



FIG. 31.—“SIDE PUSHES,” THIRD COUNT.

## 5. SIDE PUSHES.

1. From "Ready," push the piece horizontally to right side, twisting the body, keeping the eyes on the piece, but keeping the heels firmly on deck.
2. Back to "Ready," chest out, elbows back.
3. Push the piece to the left side.
4. Back to "Ready."

COMMAND: *Side Pushes*—1, 2, 3, 4; 1, 2, 3, 4.

SPECIAL ACTION.—The rotary muscles of the body and thighs; the loin muscles.



FIG. 32.—“DIAGONAL LUNGES,” FIRST COUNT.

## 6. DIAGONAL LUNGES.

1. From "Ready," lunge diagonally to the right, about thirty-six inches, with the right leg, at the same time bringing the piece up horizontally to 45 degrees. The left foot should be flat, and the eyes directed to the piece.

2. Back to "Ready," chest out, elbows back.

3. Lunge to the left with left leg, as above.

4. Back to "Ready."

COMMAND: *Diagonal Lunges*—1, 2, 3, 4; 1, 2, 3, 4.

SPECIAL ACTION.—The muscles of the arms, back, and legs.





FIG. 33.—“FORWARD LUNGES,” THIRD COUNT.



## 7. FORWARD LUNGES.

1. From "Ready," lunge directly to the front, about thirty-six inches, with right leg, at the same time raising piece horizontally to vertical, and directing the eyes to the piece. Keep left foot flat.

2. Back to "Ready."

3. Lunge to the front with left leg, as above.

4. Back to "Ready."

COMMAND: *Forward Lunges*—1, 2, 3, 4; 1, 2, 3, 4.

SPECIAL ACTION.—The muscles of the arms and legs and the side walls of the chest.



FIG. 34.—“FRONT SWEEPS.”

## 8. FRONT SWEEPS.

1. From "Ready," raise the piece horizontally to high vertical, keeping chest well out, and emphasizing the up-stretch.

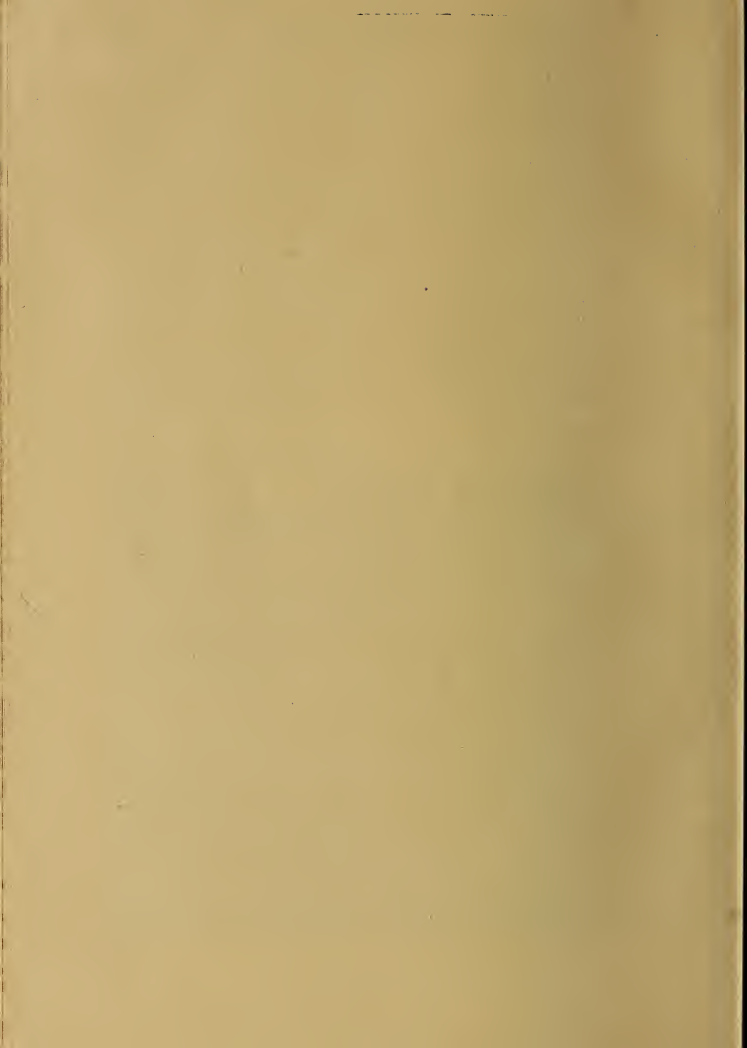
2. Lower the piece slowly in front semicircle to insteps, keeping the arms straight and emphasizing the out-reach.

3. Raise the piece slowly in front semicircle to vertical.

4. Down to "Ready."

COMMAND: *Front Sweeps, Slow*—1, 2, 3, 4; 1, 2, 3, 4.

SPECIAL ACTION.—All the principal posterior muscles of the body.



## 9. OVERHEAD TWISTS.

1. From "Ready," raise the piece overhead, at the same time twisting it till the butt points directly forward. Keep the piece horizontal.

2. Twist the piece to the right until the muzzle points directly forward. Hold the hips firmly forward, confining the movement to the upper part of the body.

3. Twist back till the butt points directly forward.

4. Lower the piece to "Ready."

1. From "Ready" raise the piece overhead, at the same time twisting it till the muzzle points directly forward.

2. Twist the piece to the left until the butt points directly forward.

3. Twist back until the muzzle points directly forward.

4. Lower the piece to "Ready."

COMMAND: *Overhead Twists, Butt Forward*—1, 2, 3, 4;  
*Muzzle Forward*—1, 2, 3, 4.

SPECIAL ACTION.—The rotary muscles of the upper part of the body; also stimulates the venous circulation.

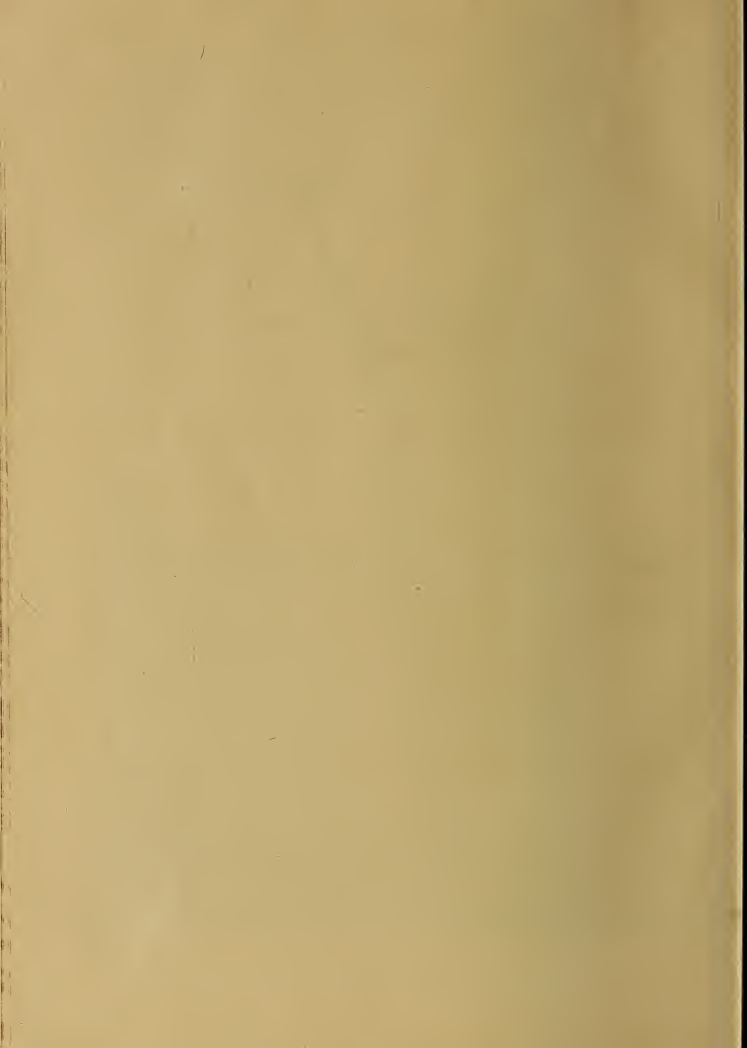


FIG. 35.—“OVERHEAD TWISTS,” BUTT FORWARD.





FIG. 36.—“OVERHEAD TWISTS,” MUZZLE FORWARD. (Side view.)



## 10. SIDE TWISTS.

1. From "Ready," drop the piece horizontally in front to position No. 2 in "Coming to Ready."

2. Lifting the butt up, carry the piece strongly to the left side and out, muzzle pointing directly down. Keep the hips firm.

3. Return the piece to position No. 2 in "Coming to Ready."

4. Lifting the muzzle, carry the piece strongly to the right side and out, muzzle pointing directly up.

Repeat the exercise.

COMMAND: *Side Twists*—1, 2, 3, 4; 1, 2, 3, 4.

SPECIAL ACTION.—The muscles of the sides, loins, and small of the back.

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At the end of Exercise 10, come to "Order Arms."



FIG. 37.—“SIDE TWISTS,” SECOND COUNT.



FIG. 38.—“SIDE TWISTS,” FOURTH COUNT.

